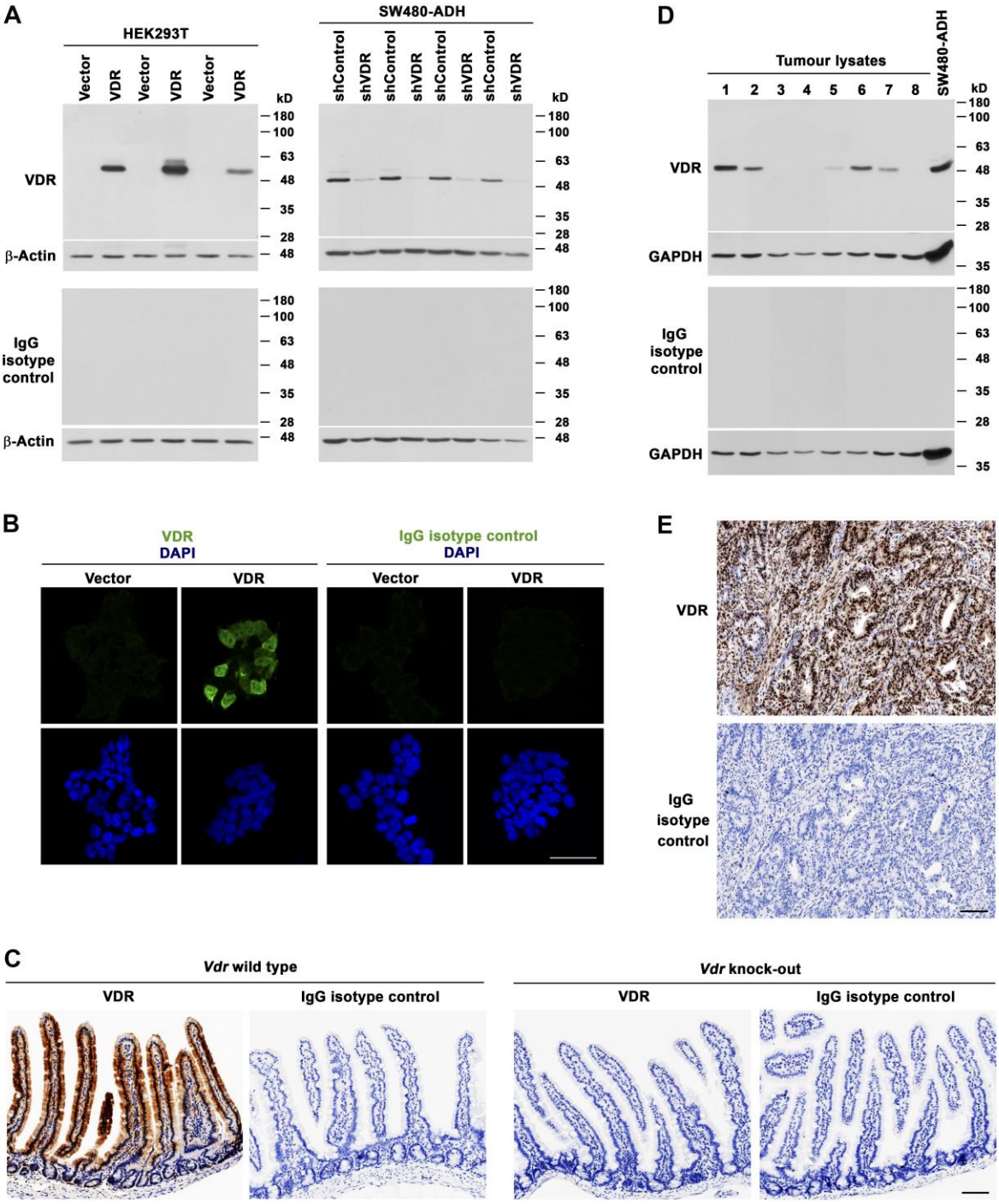
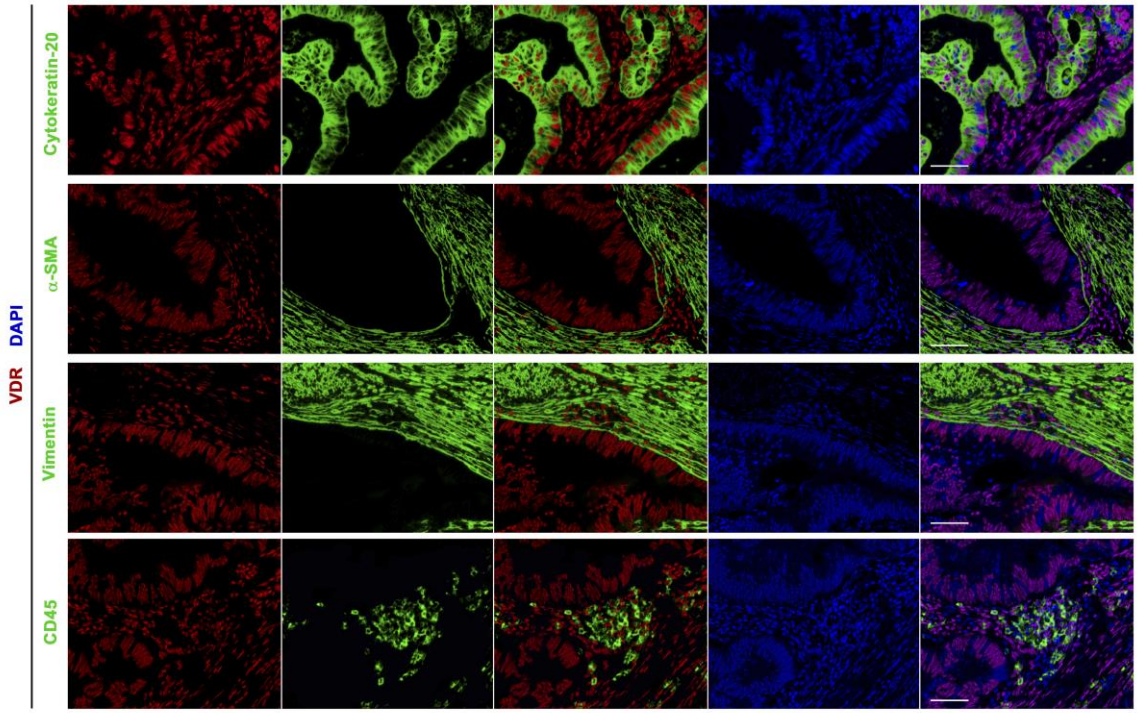
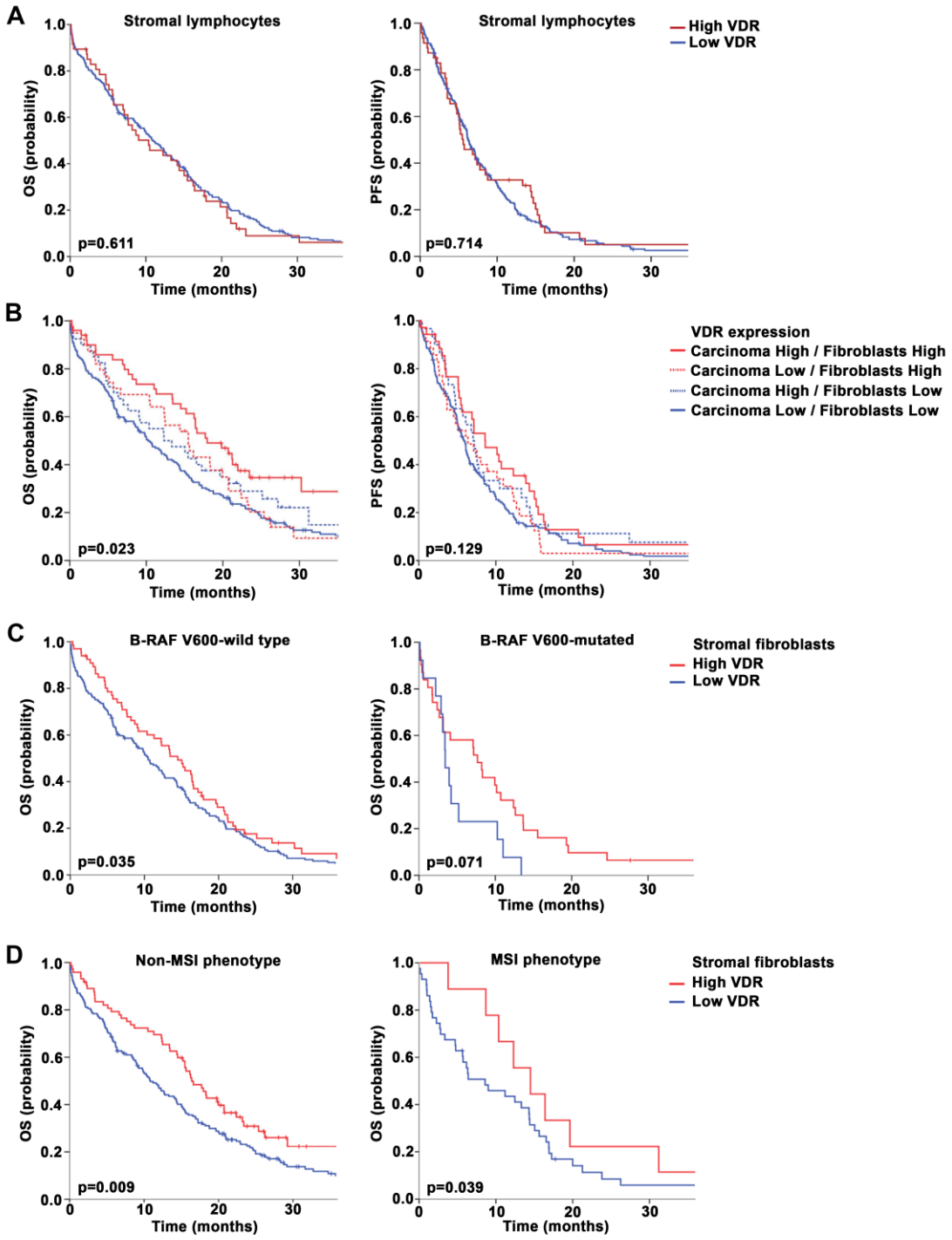
Supplementary figures



Supplementary Figure S1 Specificity of the anti-VDR antibody used for the immunohistochemical analysis of human CRC samples. (A) Western blot analysis of VDR protein expression in HEK293T cells transiently transfected with an expression vector for VDR or the empty vector (n=3) and in SW480-ADH cells stably expressing a shRNA against VDR (shVDR) or a non-targeting shRNA (shControl) (n=4). β-Actin was used as loading control. (B) Representative immunofluorescence images of VDR protein expression in HEK293T cells transiently transfected with an expression vector for VDR or the empty vector. Bar, 50 μm. (C) Representative immunohistochemical images of VDR protein expression in small intestine from wild type and *Vdr* knock-out mice. Bar, 50 μm. (D) Western blot analysis of VDR protein expression in lysates from human colorectal tumours (n=8). SW480-ADH cell lysate was included as a positive control. GAPDH was used as loading control. (E) Representative immunohistochemical images of VDR protein expression in human colon tumours. Bar, 50 μm. (A-E) Equivalent blots, coverslips or tissue slides were incubated with rabbit IgG isotype control antibody or without primary antibody (data not shown) to evaluate non-specific reactions.



Supplementary Figure S2 VDR expression in different cell types present in colorectal tumours. Representative double immunofluorescence images of the expression of VDR and epithelial (cytokeratin-20), fibroblast (α-SMA and vimentin), or lymphoid (CD45) markers in tumour samples from CRC patients. Bars, 30 μm.



Supplementary Figure S3 Associations of VDR protein expression levels with CRC patient survival. (A) Kaplan-Meier survival curves depicting OS or PFS of CRC patients (n=658) stratified by VDR protein expression levels in tumour stromal lymphocytes. (B) Kaplan-Meier survival curves depicting OS or PFS of CRC patients (n=658) stratified by VDR protein expression levels in carcinoma cells and tumour stromal fibroblasts. (C) Kaplan-Meier survival curves depicting OS of B-RAF V600-wild type (n=607) or -mutated (n=51) CRC patients stratified by VDR protein expression levels in tumour stromal fibroblasts. (D) Kaplan-Meier survival curves depicting OS of CRC patients with (n=42) or without (n=616) MSI phenotype stratified by VDR protein expression levels in tumour stromal fibroblasts.